

Claim ~~23~~<sup>1</sup> (Currently Amended) A device for reproducing a digital signal recorded on a medium, the digital signal including a video signal and an audio signal, the audio signal being composed of data units ~~and each data unit including information for identifying a type of audio signal represented by the data unit,~~ the data units corresponding to at least one of:

1) a first type of digital audio data, and

2) a second type of digital audio data which includes at least one content different from the first type of digital audio data;

each data unit including attribute information, which has:

a) first information indicating a coding mode of the digital audio data,  
and

b) second information, different than said first information, identifying the data unit as one of the first type of digital audio data or the second type of digital audio data;

~~a block of the data units of audio signal being sequentially interleaved between data units of video signal, comprising:~~

~~a demodulator for demodulating the digital signal to restore an original signal;~~

~~a signal processor for receiving the audio signal, demodulated by the demodulator, extracting the second ~~indicating~~ information, separating the data units corresponding to a first type of audio signal from data units corresponding to a second type of audio signal based on the extracted second~~

H

indicating information, said signal processor including a system time clock, a memory for storing the data units corresponding to the first type and the second type of audio signal, and first or ~~and~~ second audio presentation parts receiving the system time clock to control a presentation timing of the first type or the second type of audio signal; and

a controller, coupled to the signal processor, controlling the signal processor to output the data units corresponding to the first type or the second type of the audio signal designated by a user input, wherein the first or second type of audio signal, designated by the user input, is identified using the second information.

[ Claim 24. (Canceled)

Claim <sup>2</sup>~~25~~. (Previously Presented) A device as claimed in claim <sup>1</sup>~~23~~, wherein the first type of audio signal corresponds to accompaniment sound.

[ Claim 26. (Canceled)

Claim <sup>3</sup>~~27~~. (Previously Presented) A device as claimed in claim <sup>1</sup>~~23~~, wherein the audio signal is encoded by an MPEG coding mode, wherein the signal processor further comprises:

an MPEG audio decoder for decoding the audio signal.

H

4  
I/ con 4  
Claim 28. (Currently Amended) A method for reproducing a digital signal recorded on a medium, said digital signal including a video signal and an audio signal, the audio signal being composed of data units ~~and each data unit including information for identifying a type of audio signal represented by the data unit,~~ the data units corresponding to at least one of:

1) a first type of digital audio data, and

2) a second type of digital audio data which includes at least one content different from the first type of digital audio data;  
each data unit including attribute information, which has:

a) first information indicating a coding mode of the digital audio data,  
and

b) second information, different than said first information, identifying the data unit as one of the first type of digital audio data or the second type of digital audio data;

~~a block of the data units of audio signal being sequentially interleaved between data units of video signal,~~ the method comprising the steps of:

demodulating the digital signal to restore an original signal;

receiving the demodulated audio signal;

extracting the second ~~indicating~~ information;

separating the data units corresponding to a first type of audio signal from data units corresponding to a second type of audio signal based on the

H

~~units of the first type and the second type, the data units corresponding to at~~

least one of:

1) a first type of digital audio data, and

2) a second type of digital audio data which includes at least one content  
different from the first type of digital audio data;

each data unit including attribute information, which has:

a) coding information indicating a coding mode of the digital audio data,  
and

b) identification information, different than said coding information,  
identifying the data unit as one of the first type of digital audio data or the  
second type of digital audio data;

the audio signal processor extracting the identification ~~indicating~~ information,  
and separating the data units of the first type from the data units of the second  
type using the identification ~~indicating~~ information, said signal processor  
including a system time clock, a memory for storing the data units of the first  
type and the second type, and first and second audio presentation parts  
receiving the system time clock to control a presentation timing of the data  
units of the first type or the second type; and

a control circuit controlling the audio signal processor to output an audio  
signal corresponding to the data units of one of the first or second types, based  
on the identification information ~~a user input~~.

14

I  
Con 4  
extracted second ~~indicating~~ information, by storing the first and second types of audio signals in a memory, receiving the data units corresponding to the first and second types of audio signals in first and second audio presentation parts along with a system time clock to control a presentation timing of the first or second type of audio signal; and

outputting one of the first or second types of audio signals in response to a user input designating one of the first or second types of audio signals, wherein the first or second type of audio signal, designated by the user input, is identified using the second information.

45  
Claim ~~29~~. (Previously Presented) The method of claim ~~28~~, wherein the step of separating includes separating the first type of the audio signal representing accompaniment sound.

[ Claim 30. (Canceled)

6  
Claim ~~31~~. (Currently Amended) A device for processing a digital signal, comprising:

an audio signal processor receiving ~~indicating information and~~ data units of digital audio data of a first type and a second type interleaved with digital video data, the ~~indicating information indicating an identification of the data~~

H/

Claim 32. (Canceled)

I  
Con 4  
7  
6  
Claim ~~33~~<sup>7</sup>. (Previously Presented) The device of claim ~~31~~<sup>6</sup>, wherein the audio data of the first type includes accompaniment sound.

8  
6  
Claim ~~34~~<sup>8</sup>. (Currently Amended) The device of claim ~~31~~<sup>6</sup>, wherein the data units of digital audio data are interleaved with digital video data, and wherein the audio data of the first type includes accompaniment sound and vocals, which are associated with the digital video data.

9  
6  
Claim ~~35~~<sup>9</sup>. (Previously Presented) The device of claim ~~31~~<sup>6</sup>, wherein the audio signal processor compares the system time clock to timing information in the digital audio data, and outputs audio data with a timing based on the comparison.

10  
6  
Claim ~~36~~<sup>10</sup>. (Previously Presented) The device of claim ~~31~~<sup>6</sup>, wherein the audio signal processor MPEG decodes the audio data.

11  
6  
Claim ~~37~~<sup>11</sup>. (Original) The device of claim ~~31~~<sup>6</sup>, further comprising:

a demodulator demodulating the digital audio data prior to receipt by the audio signal processor.

H

12  
Claim 38. (Currently Amended) A method for processing a digital signal,

I!  
cont  
comprising:

receiving ~~indicating information and~~ data units of digital audio data ~~of a~~  
first type and a second type interleaved with digital video data, the indicating  
information indicating an identification of the data units of the first type and  
the second type, the data units corresponding to at least one of:

1) a first type of digital audio data, and

2) a second type of digital audio data which includes at least one content  
different from the first type of digital audio data;

each data unit including attribute information, which has:

a) coding information indicating a coding mode of the digital audio data,  
and

b) identification information, different than said coding information,  
identifying the data unit as one of the first type of digital audio data or the  
second type of digital audio data;

extracting the identification ~~indicating~~ information;

separating the data units of the first type from the data units of the  
second type using the identification ~~indicating~~ information by storing the data  
units of the first and second types in a memory, receiving the data units of the  
first and second types in first or ~~and~~ second audio presentation parts along  
with a system time clock to control a presentation timing of data units of the  
first or second type; and

H

outputting audio data corresponding to the data units of the first or  
second type in response to the identification information ~~a user input~~.

Claim 39 (Canceled)

Claim <sup>13</sup>40. (Previously Presented) The method of claim <sup>12</sup>~~38~~, wherein the audio data of the first type includes accompaniment sound.

Claim <sup>14</sup>41. (Currently Amended) The method of claim <sup>12</sup>~~38~~, wherein the data units of digital audio data are interleaved with digital video data, and wherein the audio data of the first type includes accompaniment sound and vocals, which are associated with the digital video data.

Claim <sup>15</sup>42. (Previously Presented) The method of claim <sup>12</sup>~~38~~, further comprising:  
comparing the system time clock to timing information in the digital audio data; and  
outputting the audio data with a timing based on the comparison.

Claim <sup>16</sup>43. (Previously Presented) The device of claim <sup>12</sup>~~38~~, wherein the separating step includes MPEG decoding the audio data.

17



17  
I  
Correl.  
Claim ~~44~~. (Previously Presented) The device of claim ~~23~~, wherein the signal processor includes a switch that selectively outputs the data units of the first type or the second type.

---

H